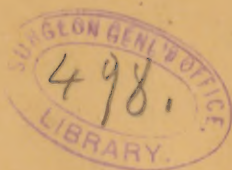


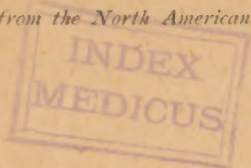
BETTMAN (B.)

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cured by canthotomy



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SPASTIC SENILE ENTROPION CURED BY CANTHOTOMY.*

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Gentlemen:—The patient I present you today has recovered from a lid trouble which lasted about half a year. During that time a number of measures were employed for his alleviation, without avail, until I determined as a *dernier ressort* to make a canthoplasty, the good results of which were immediate and permanent.

This gentleman had a spastic entropion of both lower eye-lids. If you will examine him closely, you will observe a linear and several punctiform scars on these parts due to the various operations made to give the lids a normal position. You will also observe that the cilia are turned outward and that when he winks or closes his eyes the lid margins remain in the frontal plane.

A few words as to entropion in general, before we repeat his clinical history. The term, as you know, indicates an inversion of the lids. This condition is either partial or complete—and may be due to a variety of causes.

For the sake of brevity and clearness three forms of entropion are recognized, due to various anatomical or rather pathological factors: Muscular entropion, cicatricial entropion; entropion bulbale. The second variety is well illustrated in those cases resulting from trachoma where the chronic inflammatory process induces cicatrization of the palpebral conjunctiva resulting in a curved condition of the lids and an inversion of their edges.

When the lid support is lacking, associated with slight changes in the conjunctiva, as in enucleation of a sensitive eye, the third form of entropion often occurs.

The variety to which I wish to call particular attention is due to spasmodic action of the ciliary margin of the obicular muscle. Ordinarily there is associated with it a relaxed condition of the cutaneous surface, and an irritability of the conjunctiva, as for instance a conjunctivitis, giving rise to senile entropion and spastic entropion.

It may be only temporary and instantly relieved when the exciting cause is removed, as unbandaging an eye which has been kept covered. Again, it may be more permanent and only relieved by operative measures.

*A Clinical Lecture delivered at the Post-Graduate Medical School, Chicago.



The case in question is one of this nature, and if you will follow the clinical history as I relate it, you will become acquainted with the usual treatment adopted, and also with the difficulties often encountered in arriving at a successful termination.

The mucous lining of this patient's lids is slightly discolored, having a brownish appearance, known as argyrosis, due to long continued applications of nitrate of silver.

Our patient, who is sixty-five years old, was admitted into the Illinois Charitable Eye and Ear Infirmary April 2, 1892, suffering from a spastic entropion of both lower lids. He informed us that during the past four years he had repeated attacks of conjunctivitis which had been cured by application of silver nitrate. The ciliary margins were so completely everted that the ciliae were barely visible. On everting the lids with the finger they retained their normal position until he winked, when they again forcibly turned inward.

The palpebral conjunctiva of both eyes was swollen, reddened, and partially covered by a muco-purulent discharge. The cutaneous surface was wrinkled. The conjunctivitis had lasted about a week and was either the result or cause of the entropion. I therefore determined to overcome both symptoms as neither could be abrogated unless both subsided.

The conjunctivitis was treated with a one per cent. solution of nitrate of silver and the lids everted and fastened to the cheeks by strips of adhesive plaster. These, however, would not hold the parts in place, the tears and secretion constantly flowing over the face, wetting and washing them off. Pads were next applied under the lids held firmly in position by bandages—with no better results. I then passed two sutures through each lid at the edges underneath the skin and brought the end out an inch below and fastened them over two pieces of rolled paper. As long as they remained *in situ*, the cilia retained their normal position and the conjunctivitis ceased. No sooner had the threads cut through than the entropion returned.

This operation was repeated on the lower lid June 16, but a week later both lids had gradually resumed their abnormal position and the conjunctivitis returned.

Aug. 22 my assistant, Dr. Woodruff, made a double Hotz's operation combined with the removal of an oval piece of skin. In other words, the ciliary margin was fastened to the lower margin of the tarsus. The result of this maneuver was temporarily good; at the end of three weeks the old state of affairs had returned. The eye-lashes swept over the conjunctiva and cornea, causing an irritation which resulted in conjunctivitis.

Having exhausted all the methods ordinarily employed for the correction of this condition and having been balked at every step, I

for the first time gave the matter my serious attention and considered its pathological features—which, as you know, are spasmodic action of the ciliary margin of the obicular muscle and secondary conjunctival irritating.

It occurred to me that if the contraction of the muscular fibres could be overcome and their power lessened; the spasmodic action would cease. I therefore decided to divide the muscles to make, in other words, a canthotomy. This I did in the following manner: I introduced the blade of a straight pair of scissors under the outer canthus, the other blade passed over its outer surface and the intervening parts were cut at one stroke. Thus I severed the inner edge of the orbicularis palpebralis muscles in both eyes.

The result was not only immediate, but permanent, the patient being discharged three weeks later, Dec. 20, perfectly cured. Today, March 15, his lids appear absolutely normal excepting the scars already referred to. This operation has, so far as I can learn, never been performed for spastic senile entropion, although it has been adopted for entropion due to blepharospasm associated, however, with the excision of a fold of skin from the lid.

The indication of this operation in these cases appears quite logical. An orbicular muscle is in a state of clonic spasm. The end in view is to induce its relaxation. If I again meet a similar case, I shall at first try hot or cold applications, then hypodermic injections of morphine, and if the spasm doesn't yield, cut the tense contracted muscular fibres which in this case abolished the spastic condition.

TREATMENT OF STRABISMUS.

As long as the minds of medical men are subject to the same influences which affect the brain of other mortals, so long will results of investigations take upon themselves the color of various stages of scientific periods. No branch of ophthalmology illustrates this more fully than the chapter devoted to strabismus. After the conception of orthopedic surgery had been fully formed by Stroy Meyer and special attention had been directed by him to strabismus, the keen surgeon Dieffenbach, practically carried his suggestions into effect. The novelty and simplicity of his new procedure created great enthusiasm, the effects of which are still felt to this day. The indications for operative interference not being fully established, the usual error of general, universal application of a remedy was committed. It was not until Graefe and Donders appeared on the scene and demonstrated the relationship between squint and errors of refraction, that the demand for more conservative treatment was heard. The rules laid

down then did not find general application. Even to this day many surgeons, although recognizing the importance of spectacle treatment, still feel the influence of former teachers and regard tenotomy of primary importance. But it is difficult to stem the tide. A reaction is beginning to set in; soon it will reach its height, and with the ebb the wave of public sentiment will flow the other way.

Physiological anatomical researches have taught us that hypermetropia is responsible for 75 per cent. of all cases of convergent strabismus. Further inquiry has proven that accommodation and convergence, which stand in intimate relationship one with the other, are the important underlying factors. What is more rational than to overcome the cause, by fitting appropriate glasses and thus correct the evil. The general practitioner, the family adviser, is frequently the obstacle to more enlightened methods. The youth of the child is regarded as an objection to curative measures, or the possibilities of "outgrowing the squint" is held out to the parents and willingly grasped by them.

The statement has been advanced that fully 50 per cent. of cases of periodic strabismus will yield, to the correction of the ametropia, by glasses and the use of atropine. If the age of the infant precludes such mode of treatment, the vitality, the function of the visual organ, should be preserved until a later age. Disuse of any organ must necessarily be followed by disturbed function. A fore-arm bandaged to the upper arm for a number of years will cause atony of the contractors and extensors. Long standing convergence will be associated with altered conditions in the dynamic power of the external and internal recti-muscles. Amblyopia from disuse will follow in the wake. A satisfactory solution of the problem lies in orthopedic training. The muscles of paralytics are kept in a normal state by exercising them. The acuity of vision and contractile force of the recti can be equally preserved by bandaging the normal eye and bringing into action the deviating one. An alternating squint may thus be produced which will render more facile the subsequent effects of glasses or tenotomy. The non-operative measures require a long time for fruition, but they are attended with more lasting and beneficial results to the patient and with more credit and gain to the physician.

